Decision Notice and Finding of No Significant Impact for the Dolores Aspen Landscape Vegetation Project

USDA Forest Service
Dolores Ranger District
San Juan National Forest
Dolores and Montezuma Counties, CO

Introduction

The need for this project is derived from the differences between the existing aspen forest vegetation conditions and the desired aspen forest vegetation conditions within the Dolores Aspen Landscape Vegetation Management project area. A combination of past management practices and natural ecological succession processes have created stand conditions that are far below the natural potential productivity for this area. As a result of these past management activities, current fire management policies, and ecological processes, much of the aspen on the San Juan National Forest is mature or over-mature and is in need of regeneration. The San Juan Land and Resource Management Plan (environmental assessment, pages 2-4) identifies as a desired condition a balanced distribution of the aspen vegetation type. Current conditions found within the project area differ from the desired conditions described in the Land and Resource Management Plan (environmental assessment, pages 2-3).

Project Location

The project area is located approximately 20 miles northeast of Dolores, CO on the Dolores Ranger District (Figure 1). Treatment areas are in the vicinity of Hillside Drive, Orphan Butte, Lone Cone, Cottonwood Creek, and Beef Pasture at elevations between 8,000 and 10,000 feet.

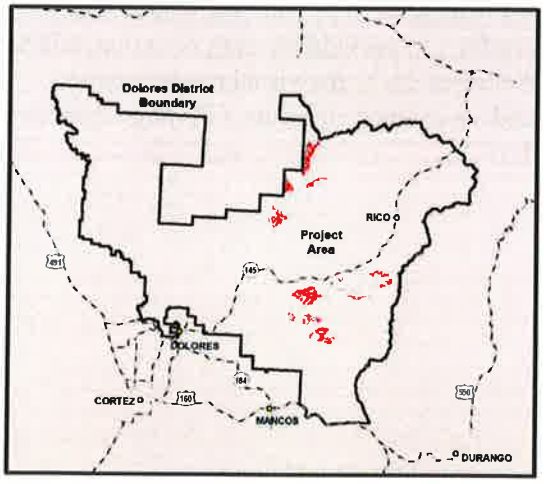

Figure 1. Vicinity map

The legal description of the project area is: portions of Township 39 North Range 14 West Sections: 1, 2, 12, 13, 14, 22, 23; Portions of Township 39 North Range 13 West Sections: 3, 4, 8, 6; Portions of Townships 40 North Range 14 West Sections: 25, 26; Portions of Townships 40

North Range 13 West Sections: 2, 3, 10, 11, 12, 14, 15,26, 27, 28, 29, 31, 32, 33, 34, 35; Portions of Township 40 North Range 12 West Sections: 1, 5, 6, 7, 8; Portions of Township 41 North Range 13 West Section 36; Portions of Township 41 North Range 12 West Sections: 7, 16, 18, 19, 20, 29, 30, 31; Portions of Township 38 North Range 13 West Sections: 25, 26, 34, 35, 36; Portions of Townships 37 North Range 13 West Sections: 1, 2, 11, 12; Portions of Township 38 North Range 12 West Sections: 30, 31, 32, 33; Portions of Township 37 North Range 12 West Sections: 4, 6, 7, 9, 10, 15, 16, 17, 18; Portions of Township 38 North Range 12 West Sections: 1, 2, 10, 11, 12, 13, 14, 24; Portions of Townships 38 North Range 11 West Sections: 18, 19; Portions of Townships 39 North Range 11 West Sections: 3, 32, 33, 34; Portions of Township 38 North Range 11 West Sections: 2, 4, 5, 10, 11, 14, 15 , New Mexico Principal Meridian, Dolores and Montezuma Counties, CO.

Decision and Rationale for the Decision

I have reviewed the environmental assessment for the Dolores Aspen Landscape Vegetation Management Project and the information contained in the project file. I have also reviewed and considered the public comments submitted on this project. I have determined that there is adequate information to make a reasoned choice among alternatives. It is my decision to select the modified proposed action as described in the environmental assessment (pages 6-15 and (figures A-2 through A-11) and in this decision notice. A map of the treatment blocks is also displayed in appendix B of this decision notice.

Decision

I have decided to treat approximately 6,819 acres of mature aspen on the Dolores Ranger District by utilizing even-aged clearfell-coppice cutting to simulate mixed and high-severity disturbances on the forested landscape as displayed in Table 1 below, and in appendix B of this decision notice. This silvicultural method for each harvest unit will be a final regeneration treatment and will be implemented in a single operation. All stands and harvest units will receive the coppice harvest treatment. This treatment will remove all of the trees within a cutting unit with the exception of leave tree reserves. Each unit will incorporate no-cut, leave tree reserve areas equal to 10 to 15 percent of the total unit acres. The purpose of the reserve areas is to provide for wildlife habitat connectivity to adjacent uncut stands and riparian corridors, to provide for snag retention, and to mitigate temporary adverse impacts resulting from the treatment to the visual resource when viewed from the roadway. Temporary openings created by coppice clearcuts will range from two to two hundred acres in size and be unevenly shaped.

Table 1. Dolores aspen vegetation treatment acres by geographic area and block

Block Name	Geographical Area	Treatment Acres
Ground Hog Cut-off	Ground Hog	542
Ground Hog Point	Groundhog	1,189
Willow Divide	Groundhog	358

Block Name	Geographical Area	Treatment Acres
Hillside	Hillside	294
Orphan Butte	Orphan Butte	565
Mavreeso	Mavreeso	841
Jersey	Jersey Jim	956
Rock	Jersey Jim	1,575
Spring	Jersey Jim	139
Turkey	Jersey Jim	360
Total	**All**	**6,819**

The primary tree species proposed for harvest is aspen; however, when merchantable conifer species exist within an aspen stand, the merchantable conifer will also be harvested.

A combination of ground-based mechanized equipment and hand-falling with chainsaws will be used to harvest the timber (both aspen and conifer). Sub-merchantable aspen and conifer will be felled onsite or removed as slash/biomass. Additional activities connected to the proposed action will include: maintenance and reconstruction of existing forest system roads; temporary road construction and obliteration; and slash treatment, as described in detail below.

Connected actions associated with the proposed vegetation treatment will include maintenance-related road-work. The work will be performed prior to, during, and/or following mechanical treatments. The majority of this work will involve reshaping and smoothing of the road surface and restoring any associated drainage ditches or rolling dips. Several additional Maintenance Level (ML) 1 (stored roads) that have been closed and unused for the last 20 to 30 years will be reopened, utilized for the project, and put back in storage after use. These roads may require some level of reconstruction, in addition to normal maintenance, to return them to an operational status. Reconstruction will consist of clearing downed trees and grown-in vegetation; installing or repairing drainage at stream crossings, along roadside ditches, or associated with rolling dips; and repairing failed sections of the roadway. Table 2 below, identifies the proposed primary haul route. Forest products will be removed from the Forest via the following Forest Service roads:

Table 2. Primary haul route

Geographic Area	Road Name	Road Number
Orphan Butte	Roaring Fork Road	FSR 435
Hillside	Hillside Road	FSR 436
Jersey Jim	West Mancos Road	FSR 561
Mavreeso Canyon	Cottonwood Road	FSR 532
Ground Hog	Ground Hog Road	FSR 533
Rock	Rock Springs	FSR 556

No new permanent roads are proposed to be constructed with this project. Implementing the proposed action will require development of approximately 40 miles of temporary road. Creating these roads will involve clearing vegetation and minimal construction. Temporary roads will be constructed, utilized and reclaimed when rainfall and erosion potential is minimal. These road segments will be decommissioned and obliterated with a goal of re-vegetation within five years of last use.

Any existing system roads currently closed to public motorized use will remain closed (except for permitted use) during and following operations. Closures will be accomplished via a variety of means, such as by tank traps, gates, or boulder barriers. Disturbed areas will be scarified and seeded following use. All roads in the project area that are currently open to public car and truck traffic will remain open following operations. Short-term closures of publicly accessible roads or trails may be necessary for safety purposes during logging operations,

Other related activities will include the reduction of activity created slash. Cutting and removal of trees will result in limbs, tops, un-merchantable boles and stems (slash). Slash typically becomes concentrated at landing locations or within the treatment units themselves. Landings are typically identified by the sale administrator during implementation with guidance from the project design features developed during this analysis. Timber sale or stewardship contracts will require concentrations of this material to be disposed of by a) piling for later burning, b) lopping and scattering throughout the unit, c) a combination of scattering and piling/burning, or d) removal as fuelwood/biomass. The method used will be dependent upon the amount of slash generated and the mechanical means employed by the contractor, as well as, specific conditions within the unit. If whole tree yarding is used by the contractor machine piling will be required on the landings due to excessive slash generated. Machine piling will not be conducted in areas where slash loads do not warrant this type of treatment. Machines used to pile slash shall be equipped with a brush blade or acceptable equivalent. Slash piles will generally be left on-site for at least a year for this material to dry prior to burning by Forest Service crews. Pile burning typically takes place when ground is snow-covered. Following burning, these sites will be monitored for weed establishment and treated as necessary. Post sale reclamation needs for landings will also be identified.

Decision Rationale

My decision is based on close and careful examination of the information in the environmental assessment and the project file, direct consultation with resource specialists and previous experience with similar activities. I have fully considered the concerns identified through the planning process and public comments received during the original proposal scoping, as well as, the subsequent environmental assessment comment period. I have carefully weighed the environmental and social effects of the action against the purpose of and need for action. Implementation of the modified proposed action is the best choice for addressing the needs and accomplishing the purposes discussed above in this decision notice.

The aspen forest type is an exceedingly valuable resource in the region. Aspen stands provide high quality summer range for domestic livestock and a mosaic of diverse habitats for a variety of wildlife species. Areas of aspen serve as living firebreaks on the landscape and are very important for recreational and esthetic reasons. Aspen wood is utilized by industry to produce a wide variety of products, including: erosion control products, paneling, packaging material, evaporative cooler pads, matchsticks, oriented strand board, excelsior, mine cribbing, and fuel wood. Local forest product businesses are partially dependent on the San Juan National Forest for raw materials.

The primary objectives of the project are discussed in detail in the Need for the Proposal (pages 2-5 of the environmental assessment). The modified proposed action would make available an estimated 272,760 CCF of aspen products to support local aspen dependent industries. The sale of these products would also produce revenues for the government, some of which could be directly reinvested on the San Juan National Forest in the form of sale area improvement projects and future resource stewardship service contracts.

The modified proposed action would improve the productivity of aspen stands and provide a sustainable forest for future generations by replacing these stands with vigorous younger trees. As these stands develop, the future productivity of these renewed aspen stands is expected to be greatly enhanced compared to what would be expected without management intervention. The analysis detailed in Vegetation (pages 18-21) of the environmental assessment suggests the regenerated stands would exhibit very high average annual growth rates and could easily regrow the harvested wood volumes within 80 years.

The treatments in the modified proposed action would also provide needed progress towards maintaining the desired ecosystem diversity on the landscape. All 6,819 acres of treatment blocks would be maintained in an aspen dominated cover type for at least the next century, and the balance of age classes distributed across the landscape would be improved by converting these areas from mature stands to a younger developmental stage.

I considered taking no action at this time, however, the No Action alternative would not meet the stated objectives of the project and would likely have some negative consequences in terms of moving toward Forest Plan desired conditions. No merchantable products would be provided to the local aspen dependent industries in the short term, and the long term health and productivity of these stands into the future would likely decline as is outlined under Vegetation (pages 18-21) of the environmental analysis.

The other important consequence of the no action alternative is the conversion of species composition. Analysis indicates that without management or high severity disturbance there is a high probability that many of these stands will transition into conifer dominated vegetation types within the next century and the aspen based plant communities now represented would be lost.

I find that this decision represents a reasonable opportunity to move toward and realize the specific Forest Plan based objectives of the project. The analysis in the environmental assessment (pages 17- 52) demonstrates that the potential for negative consequences to the environment is minimal and further considerations supporting a finding of no significant impact from this action are detailed below in in this decision notice.

Other Alternatives Considered

In addition to the modified proposed action, I considered a no action alternative. Under the No Action alternative, current management plans would continue to guide management of the project area. The consequences of taking no action can be found on pages 2, 19-20, 22, 25, 28, 32, 37, 42, 44, and 48 of the environmental assessment.

The following alternatives were also considered but eliminated from detailed study.

- Development of a passive management alternative that does not include logging or other ground-disturbing management activity.
    - The no action alternative includes this approach. An additional alternative is not warranted.
- Development of an alternative specific to sudden aspen decline.
    - How the proposed treatments impact sudden aspen decline, and how sudden aspen decline impacts the outcomes of the treatment, is included in the existing condition

discussion and in the effects analysis for each alternative. An independent alternative is not warranted.

- Development of an alternative that includes additional restoration activities beyond those connected to the proposed action.
  - This is outside of the scope of the project as defined by the deciding official. Additional restoration activities in this landscape can be addressed more efficiently with an independent environmental analysis.
- The original proposed action, as scoped.

  Pursuant to 40 CFR 1502.21, the original proposed action was incrementally modified in response to scoping. Therefore, the modified proposed action will be analyzed in detail and the original proposal will be eliminated from further analysis. A brief description of these changes is displayed on pages 16 and 17 of the environmental analysis.

Public Involvement and Scoping

Scoping packages were distributed to 78 individuals, organizations, permittees, agencies, and congressional representatives on October 22, 2018. A Public News Release was made to local media on October 23, 2018. The Dolores Aspen Landscape Vegetation project was identified on the San Juan National Forest Schedule of Proposed Actions beginning January 1, 2019. Scoping packages were also made available to participants attending the Dolores Watershed Resilience Collaborative with periodic updates as the project developed. Individual specific comments, listed by commenter, are included in the project record. The scoping period was 30 days long; beginning October 22, 2018 and ending November 22, 2018. Twelve comment letters were received which included a total of 38 individual comments.

The majority of the comments were related to project design and the prudent application of project design features. Commenters asked that we eliminate unnecessary and redundant restrictions that limit the ability to operate. Others requested additional measures for further protection of resources. Commenters also voiced concern about the potential for disturbance to existing motorized trails as a result of project activities. As well, commenters were concerned that the project would result in closure of exiting trails and roads. Stakeholders also requested that we include vigorous analyses around carbon costs and the cost-to-benefit of implementing the project. Other comments focused on the protection of fish and wildlife and the potential consequences of domestic livestock grazing on the success of the proposed treatments.

A legal notice of a 30-day opportunity to comment on this project was published in the Cortez Journal on June 7, 2019. Three individual comment letters were received. Commenters were generally in support of the proposed project activities. One individual voiced concern relative to the phased timing of harvest operations and a subsequent increase in contractor mobilization costs. Contact was made with the commenter to clarify that as one unit closed the other would open to allow for the continuous the flow of wood and that there would be no need to remobilize the contractor. The conversion is documented in the project record.

Finding of No Significant Impact

Context

The San Juan National Forest is 1,800,000 acres. The modified proposed action includes vegetation treatments on 6,819 acres. The project activities comprise less than 0.4% of the San Juan National Forest. This project is a site-specific action that by itself does not have an international, national, region-wide, or state-wide importance. The discussion of significance criteria that follows, applies to the modified proposed action and is within the context of local importance in the area associated with the Dolores Aspen Landscape Vegetation Management treatment area.

Disclosure of the direct, indirect, and cumulative effects in the environmental assessment differ by the resource being analyzed. Due to these differences among resource areas, multiple scales and levels of analysis were used to determine the significance of the effects on the human environment.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of the environmental analysis and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b) and discussed specifically below.

1. **Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.**

   Both beneficial and adverse effects of the proposed action have been disclosed and considered. The proposed action will have beneficial effects within the context of addressing the stated purpose and need of the project. Refer to *Need for the Proposal* (environmental assessment, pages 2-5) and the *Vegetation* effects discussion (environmental assessment, pages 18-21). The evaluation of the intensity of adverse effects on each affected resource was made without being biased by, or balanced against, perceived beneficial effects. Refer to the effects analysis in *Environmental Consequences* (environmental assessment, pages 17-52). Viewed in this light, the disclosed adverse effects associated with the proposed action are believed to be minor in nature. The existence of considerable beneficial effects in the absence of significant adverse impacts does not warrant the preparation of an environmental impact statement.

2. **The degree to which the proposed action affects public health or safety.**

   The proposed action would have little if any effect on public health or safety. Any potential for increased vehicle traffic conflicts on forest roads would be mitigated through implementation of design features such as signing and limitations on the extent of winter operations. Drinking water supplies of local communities would not be affected. Refer to *Project Design Features* (environmental assessment, pages 8-15), the discussions of effects to recreation (environmental assessment, pages 25-28), and the watershed (environmental assessment, pages 32-35).

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

No actions would occur within or affect prime farmlands, wilderness areas, roadless areas, wild and scenic rivers, or other designated special areas (environmental assessment, page 2). Wetlands including high elevation fens would be protected by avoidance or design features (environmental assessment, pages 9-11). Refer below for a discussion of historical and cultural resources.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

These types of silvicultural treatments have been performed throughout North America for decades and their associated effects have been rigorously documented in the existing body of scientific literature. There is no evidence of any substantial scientific dispute regarding the size or nature of the effects resulting from the proposed action (Environmental Consequences, environmental assessment, pages 17-52; and References (environmental assessment, pages 54-56).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

This project is not unique, as the San Juan National Forest has been conducting timber harvest and forest management programs historically since the early 20th century. When professional experience is paired with the substantial body of literature on the subject, there is little uncertainty regarding effects. The effects of the modified proposed action has been fully analyzed (Environmental Consequences, environmental assessment, pages 17-52).

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

This is a stand-alone project and its associated actions would not set a precedent or make a decision in principle about future actions or considerations. Any new proposals for forest management, similar to or entirely different from the modified proposed action would be subject to further site-specific evaluation and analysis as required under the National Environmental Policy Act.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The effects of one project must overlap in time and space with the effects of other projects in order to produce a cumulative effect. The spatial and temporal scales considered for cumulative effects vary depending on the resource being analyzed. Cumulative effects are discussed for each resource under Environmental Consequences (environmental assessment, pages 17-52). No significant cumulative effects associated with the modified proposed action were identified for any resource, and when reviewed together, no major effects are considered likely (environmental assessment, pages 21, 24, 27, 28-29, 34, 37-38, 41, 43, 45-46, 48, 49-50, and 51).

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

Pursuant to Stipulation V.B of the Cultural Programmatic Agreement (PA), notification has been sent to SHPO for the project. A cultural resources inventory of the proposed project's Area of Potential Effects will be performed prior to project implementation pursuant to Stipulation VI of the Cultural PA. The Forest anticipates that a finding of no adverse effect to historic properties will be recommended for the project pursuant to 36 CFR 800.5(b). SHPO concurrence with the recommended finding will be obtained prior to project implementation. Consequently, the proposed action is not expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic places or cause loss or destruction of significant scientific, cultural, or historical resources (environmental assessment, pages 71-72).

9. The degree to which the action may adversely affect an endangered or threatened species.

A Biological Evaluation was prepared to document the possible effects of the modified proposed action to threatened and endangered wildlife species. Determinations are **No Effect** to Gunnison sage grouse, yellow-billed cuckoo, Uncompahgre fritillary butterfly, Mexican spotted owl, New Mexican meadow jumping mouse, southwestern willow flycatcher, greenback cutthroat trout or habitat, bonytail chub, Colorado pikeminnow, humpback chub, and razorback sucker (environmental assessment, page 35) and **May affect, but is not likely to adversely affect** Canada Lynx (environmental assessment, pages 35-42).

The effects of the current proposed action tiers to the effects analysis in the Southern Rockies Lynx Amendment biological opinion (TAILS 65412-2008-F-00370). Short term impacts to snowshoe hare habitat is anticipated in a very small percentage of the Bear Creek lynx analysis unit (2.7 percent), the Black Mesa lynx analysis unit (2.8 percent), and the Mancos lynx analysis unit (5.8 percent). This would most likely have an unmeasurable effect as a result of loss of habitat or to the overall snowshoe hare population within any of the lynx analysis units in the project area. In addition, approximately 2.3 percent habitat within the North La Plata Linkage Area would be impacted. This acreage is a subset of the total acreage proposed for treatment in the Bear Creek lynx analysis unit and is entirely contained in the Orphan Butte treatment block. This reduction in acreage is not expected to impact connectivity or lynx movement, since all of the proposed units occur along the roadside and the placement of units allow sufficient movement of lynx throughout the linkage area and lynx analysis units. The measureable benefits of the proposed treatments would provide snowshoe hair habitat within 5 to 10 years and improve habitat conditions for lynx in the long-term (environmental assessment, pages 35-42).

A **No Effect** determination has been made for federally listed threatened and endangered plant species. There are no federally listed threatened or endangered plant species known or suspected to occur in the project area, and there is no habitat for these species within the treatment blocks (environmental assessment, page 74).

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action complies with Federal laws imposed for the protection of the environment (refer to Findings Required by Other Laws, page 10 of this document). Local land use plans were evaluated and there are no conflicts between those plans and this project (environmental assessment, pages 5-6; and pages 10-14 of this Finding of No Significant Impact).

Conclusion

After considering the environmental effects described in the environmental assessment and specialist reports, I have determined that the modified proposed action will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

Findings Required by Other Laws and Regulations

In reviewing the environmental assessment and actions associated with the modified proposed action, I have concluded that my decision is consistent with the following laws and requirements:

National Forest Management Act (NFMA)

This decision to treat approximately 6,819 acres of mature aspen on the Dolores Ranger District is consistent with the intent of the Forest Plan's long term goals and objectives listed on pages 28 and 81 of the Forest Plan. The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for forested terrestrial ecosystems (tables 2.2.1 and 2.2.2; page 22; Terrestrial Ecosystem Resource Direction), aspen forest patch size (page 22; Terrestrial Ecosystem Resource Direction), high elevation stands dominated by aspen (page 22; Terrestrial Ecosystem Resource Direction), aspen age and size class diversity (page 176; Dolores Ranger District Geographic Area Direction), forested terrestrial ecosystem with respect to representation at the landscape scale (tables 2.2.1 and 2.2.2; page 22; Terrestrial Ecosystem Resource Direction), and forested terrestrial ecosystems with respect to stand structures and tree species composition that offer resistance and resilience to changes in climate, including extreme weather events, or epidemic insect and disease outbreaks (page 22; Terrestrial Ecosystem Resource Direction).

1. **Suitability for Timber Production: No timber harvest, other than salvage sales or sales to protect other multiple-use values, shall occur on lands not suited for timber production (16 USC 1604(k)).**

   This project does not propose timber harvest on lands considered unsuitable for timber production.

2. **Timber Harvest on National Forest Lands (16 USC 1604(g)(3)(E)): A Responsible Official may authorize site-specific projects and activities to harvest timber on National Forest System lands only where:**

   a. **Soil, slope, or other watershed conditions will not be irreversibly damaged (16 USC 1604(g)(3)(E)(i)).**

      The modified proposed action would avoid impairment of soils or watershed conditions. Treatments would take place on gentle to moderate slopes, avoiding steep slopes. Soil types are appropriate for these kinds of management activities. Design features include buffers and altered harvest methods in proximity to streams and wetlands. Where negative effects may occur, they are expected to be short-term in duration and improve in the long-term. Further

supporting rationale can be found under Vegetation (environmental assessment, pages 18-21) and Hydrology (environmental assessment, pages 30-35). Units that are adjacent to or contain soils prone to mass movement will be reviewed by forest geologist prior to implementation.

b. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (16 USC 1604(g)(3)(E)(ii)).

The primary silvicultural treatment proposed in the aspen units is coppice clear-cuts. These treatments will be final regeneration treatments which create reforestation needs and are subject to the five-year restocking requirements of the National Forest Management Act. Coppice treatments would only be applied to aspen-dominated sites where the current presence of large quantities of healthy aspen provides strong support for the expectation of prolific aspen suckering following harvesting and treatment of the pre- merchantable understory. Clearcutting of aspen, on the San Juan, is known to stimulate profuse sprouting from underground root systems. Emergence of up to 30,000 stems per acre in the first year following cutting has been documented on this Ranger District (environmental assessment, page 20). The most recent similar treatments conducted in neighboring stands have resulted in abundant dense regeneration. The minimum adequate stocking required by the Forest Plan is only 300 trees per acre, but as these stands enter this stand initiation stage, aspen regeneration of anywhere from 5,000 to 20,000 trees per acre would be expected and is desired. Based on this experience, and applicable research, more than adequate regeneration stocking is expected. Regeneration levels and success will be monitored and verified with post-harvest stocking surveys.

c. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment, where harvests are likely to seriously and adversely affect water conditions or fish habitat (16 USC 1604(g)(3)(E)(iii)).

The modified proposed action was designed to comply with Regional watershed conservation practices, Forest Plan standards and guidelines, as well as, Colorado State Best Management Practices. Additional information can be located in the Hydrology section of the environmental assessment (pages 30-35) and in the description of the design features, which are part of the modified proposed action detailed in the environmental assessment (pages 8-15).

d. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber (16 USC 1604(g)(3)(E)(iv)).

The selected silvicultural treatments have been chosen because they effectively address the project goals as described in the environmental assessment and in this decision notice. Economics was considered, but was only one of many factors.

3. Clearcutting and Even-aged Management (16 USC 1604(g)(3)(F)): Insure that clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an evenaged stand of timber will be used as a cutting method on National Forest System lands only where:

a. **For clearcutting, it is determined to be the optimum method, and for other such cuts it is determined to be appropriate, to meet the objectives and requirements of the relevant land management plan (16 USC 1604(g)(3)(F)(i)).**

Clearcutting, or more specifically, clearfell-coppice cutting of aspen (all trees in the previous stand are cut and the majority of regeneration is from sprouts or root suckers) has been the traditional method of regeneration for aspen where commercial markets exist, and is widely viewed as the most effective management method to regenerate aspen (environmental assessment, page 20). The even-aged coppice clearcut harvest method selected for these aspen stands is identified in the Forest Plan Resource Direction as a proper silvicultural system for the aspen vegetation type and is appropriate to meeting the relevant objectives of the Forest Plan (Land and Resource Management Plan, pages 81).

b. **The interdisciplinary review as determined by the Secretary has been completed and the potential environmental, biological, esthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area (16 USC 1604(g)(3)(F)(ii)).**

An interdisciplinary team of specialists, covering a broad spectrum of resource areas, was convened to work through a process of environmental analysis and public input (via scoping notices, and comment review/summary) in order to evaluate the effects of implementation of the modified proposed action and to compare and contrast that with a No Action alternative. The analysis has been completed and documented in an environmental assessment and related specialist reports.

c. **Cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain (16 USC 1604(g)(3)(F)(iii)).**

Design features would include leaving clumps of residual trees within units and all cutting units would be designed to avoid sharp edges, straight lines, or strict geometric shapes. Refer to Recreation Opportunity and Experience (environmental assessment, pages 25-27) and Scenery (environmental assessment, pages 28-29); and in the related specialist's report.

d. **Cuts are carried out according to the maximum size limit requirements for areas to be cut during one harvest operation, provided, that such limits shall not apply to the size of areas harvested as a result of natural catastrophic conditions such as fire, insect and disease attack, or windstorm (FSM R1 supplement 2400-2001-2 2471.1, 16 USC 1604(g)(3)(F)(iv)).**

The proposed coppice cut treatments are considered even-aged regeneration treatments that are completed in essentially one operation. There are 66 cutting units located throughout the project area that are larger than 40 acres. The units proposed for treatment range in estimated size from 40 acres to 137 acres. A 60-day public notice was provided and a final Regional Forester review and approval is required prior to implementation in units of this size.

e. **Such cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource (16 USC 1604(g)(3)(F)(v)).**

An interdisciplinary team of specialists, covering a broad spectrum of resource areas, was utilized to work through a process of environmental analysis and public input (via scoping notices, and comment review/summary) in order to evaluate the effects of implementation of the modified proposed action and to compare and contrast that with a no-action alternative. That analysis has been completed and documented in an environmental assessment and related specialist reports.

4. **Construction of temporary roadways in connection with timber contracts, and other permits or leases: Unless the necessity for a permanent road is set forth in the forest development road system plan, any road constructed on land of the National Forest System in connection with a timber contract or other permit or lease shall be designed with the goal of reestablishing vegetative cover on the roadway and areas where the vegetative cover has been disturbed by the construction of the road, within ten years after the termination of the contract, permit, or lease either through artificial or natural means. Such action shall be taken unless it is later determined that the road is needed for use as a part of the National Forest Transportation System (16 USC 1608(b)).**

Temporary roads will be decommissioned prior to each sale contract close out to prevent unauthorized uses (environmental assessment, page 22). Temporary roads not needed for post-sale treatment would be reclaimed before contract closeout. Temporary roads to remain open for post-sale treatment would be reclaimed but these actions would be the responsibility of the Forest Service after the post-sale treatment is completed. The Forest Service would complete reclamation efforts within 5 years of post-sale treatments (environmental assessment, pages 10-11).

5. **Standards of roadway construction: Roads constructed on National Forest System lands shall be designed to standards appropriate for the intended uses, considering safety, cost of transportation, and impacts on land and resources (16 USC 1608(c)).**

All roads associated with the Dolores Aspen Vegetation Management project would be designed to standards appropriate for the proposed vegetation management activities, as required by FSM 7700. With respect to the transportation system, the modified proposed action is cost-efficient, as it utilizes the existing system for all major haul routes and uses previously utilized road templates for the majority of the temporary system. No new system roads will be constructed (environmental analysis, page 23). The primary costs associated with the proposed transportation system would be related to implementing deferred maintenance. This cost would be commensurate with the proposed use. The impacts to the land and resources associated with the transportation system have been analyzed and potential adverse impacts mitigated, and or avoided. Project design features would be implemented as part of the modified proposed action to address potential safety concerns (environmental analysis, page 13).

The National Environmental Policy Act (NEPA)

The Forest Service prepared this environmental assessment in compliance with the National Environmental Policy Act and FSH 1909.15, the National Environmental Policy Act Handbook.

The Endangered Species Act of 1973, as amended

Threatened, Endangered and Forest Service sensitive species were evaluated and the impacts described in the environmental assessment (pages 35-49) and in Biological Assessments and Evaluations located in the project file. These evaluations were conducted in in accordance with

Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). Conclusions from these evaluations are provided in the Finding of No Significant Impact, Significance Factor 9, of this Decision Notice and Finding of No Significant Impact.

The Clean Air Act

The reduction of activity created slash via pile burning is expected to be implemented within the established State, County, and Federal framework and standards, and will therefore, be in compliance with the Clean Air Act (environmental assessment, page 70).

Clean Water Act

Integrated project design features (which include implementation of regional and national BMPs) as outlined by the Proposed Action will ensure that Colorado State water quality standards and anti-degradation policy continue to be met. Full implementation of BMPs has been shown to be an effective method in preventing and controlling nonpoint source water pollution. Monitoring will be conducted during the project in order to validate implementation and effectiveness of BMP's and assure compliance with the Clean Water Act, Colorado State water quality regulations, and San Juan National Forest plan standards (environmental assessment, pages 32-35).

Floodplain Management (E.O. 11988), Protection of Wetlands (E.O. 11990)

Integrated project design features (which include implementation of regional and national BMPs) for floodplains and riparian lands will ensure compliance with EO 11988 Floodplain Management (1977), and EO 11990 Wetland Protection (1977). Riparian lands and floodplains will have a no harvest/no mechanized equipment buffer for their protection. Therefore, there will be no direct impacts to riparian lands or floodplains through the modified proposed action (environmental assessment, pages 32-35).

Civil Rights and Environmental Justice

Executive Order 12898 on environmental justice requires federal agencies to identify and address any disproportionately high and adverse human health or environmental effects on minority and low income populations. After evaluating the discussion in the environmental assessment, page 73, I have determined that there would be no discernible impacts.

The National Historic Preservation Act

The Forest will comply with Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR § 800 in accordance with the procedures outlined in Stipulation VI of the Cultural PA.

Pre-decisional Administrative Review and Objection Rights

This project is authorized under 36 CFR 218 subparts A and B. This rule provides for a pre-decisional objection process, whereby the public is provided an opportunity to comment and express concerns on projects before decisions are made, rather than after. A legal notice of a 30-day opportunity to comment on this project was published in Cortez Journal on June 7, 2019. Notice of the document availability will be sent to those who submitted comments on previous versions of this environmental assessment. Objections will only be acceptable from those who have previously submitted specific written comments regarding the proposed project during scoping or other designated opportunities for public comment in accordance with 36 CFR 218.S(a).

Implementation

If no objections are filed within the 45-day time period, implementation of the decision may occur five business days following the last day of the objection period. When objections are filed, implementation may occur immediately following the date that all concerns and instructions identified by the Reviewing Officer in the objection response have been addressed (36 CFR 218.12(b)),

For further information concerning the Dolores Aspen Landscape Vegetation Treatment Project contact David Casey (david.casey2@usda.gov) or Keith Fox (Keith.Fox@usda.gov) at 29211 Highway 184, Dolores Colorado; (970) 882-7296 during normal business hours.

Responsible Official

The District Ranger of the Dolores Ranger District of the San Juan National Forest is the official responsible for deciding the type and extent of management activities in the Dolores Aspen Landscape Vegetation Treatment project area.

Approved by:

DEREK PADILLA
District Ranger
Dolores Ranger District
San Juan National Forest

12/6/2019
Date

Appendix A - Project Design Features

Project design criteria are the constraints that the Forest Service imposes or that are imposed by other decisions on agency management activities. They set sideboards to management activities by refining specifically how actions need to happen and also what must not be allowed to happen on the ground. Project specific design criteria are developed by an interdisciplinary process or are brought down to the project level from higher level decisions or management documents such as the Forest Plan, Regional policy guidelines or state Best Management Practices. The project design features identified below are fundamental elements of the proposed action, and will be implemented as part of the modified proposed action.

Equipment Operations Practices:

- Soil-disturbing actions would be avoided during periods of heavy rain or wet soils. If ruts begin to appear on road surfaces and/or within the project area that are greater than 4 inches deep and longer than 10 feet logging operations would cease until conditions become less saturated. Ruts deeper than 4 inches would be rehabilitated.
- Road maintenance requirements required of the contractor would be included in all contracts to ensure that stable surfaces and proper drainage is maintained.
- During winter operations, roads would be maintained as needed to keep the road surface drained during thaws and break-ups. Snow berms would be removed when they result in accumulation or concentration of snowmelt runoff on the road or erodible fill slopes. Snow berms would be installed where such placement would preclude concentration of snowmelt runoff and would serve to rapidly dissipate melt water.
- Machine piling would not be conducted in areas where excessive soil disturbance could occur. If machines are used to pile slash, they would be equipped with a brush blade or equivalent.
- Normal operating season would be July 1st to November 30th depending on site-specific conditions. Annual winter harvesting and hauling operations would be allowed from December 1st through the end of February, depending on conditions. Snowplowing would be allowed. Operations may continue in the shoulder season with Line Officer approval.
- All off-road heavy equipment would be washed and free of foreign soil or debris before entering the project area.
- The use of water drafted from NFS streams for road maintenance, construction and dust abatement activities would be considered a water depleting activity with corresponding adverse effects to the four federally listed Colorado River fish. However, any water depletion activities associated with the proposed action would not exceed the Forest's allocated annual limit of 6 acre feet a year for road maintenance and construction in the Dolores River Basin as outlined in the biological opinion for the Land and Resource Management Plan Revision 2013, dated August 14, 2013. It is estimated that the project would require ten, 1,000 -1,500 gallon trucks, equaling approximately 15,000 gallons of water.

Unit Layout and Harvesting:

- The locations and clearing widths of all temporary roads would be agreed to by the Forest Service in writing before construction is started. Temporary roads would be designed to the minimum standard for their use and be located to "roll" with the terrain as feasible.

- The location of all landings and skid trails would be agreed upon by the Forest Service prior to their use.
- To the extent practicable, contractors shall protect Forest Service roads and other improvements such as trails, fences, cattle guards and ditches, as well as, any improvements that are not owned by the Forest Service affected by harvesting, hauling, or other project related operations. The contractor would be required to make timely restoration of any such improvements damaged by their operations. Where improvements must be removed for operational purposes, they would be re-built, by the contractor, to its original condition and location following harvest operations.

Watershed and Soils:

General principles and protection measures:

- For all types of riparian lands (fens, wetlands, riparian, and riparian areas), there would be a no mechanized equipment buffer. For lotic (flowing water) riparian lands, the buffer would be a minimum horizontal width from the top of each bank of 100 feet or the mean height of the mature late-seral vegetation, whichever is greater. For lentic (standing water) riparian lands, the buffer would be 100 feet from the edge of the area of riparian influence. Areas of riparian influence are indicated by a) the presence riparian vegetation or the presence of saturated, or b) seasonally saturated soils, or c) the presence of wetland hydrology indicators such as drainage patterns, drift lines, sediment deposition, watermarks, or any other visual observation of inundation.
- Access to all areas would be such that crossing streams would be kept to the minimum number necessary to treat a unit.
- At a minimum, 10 percent of treatment generated slash would be left on site and distributed throughout the treatment units. This would include placing slash on skid trails, as needed, to control erosion.
- Mechanized equipment would be restricted from operating on sustained slopes of 40 percent or greater.
- Proper drainage would be constructed or reconstructed on existing and temporary roads that would be utilized for project implementation. Logs would be used to fill in low spots and saturated areas on temporary roads. Grading would be completed to smooth the surface of the roadbed.
- The total amount of detrimentally compacted soil (e.g., ML1 roads, temporary roads, skid trails, landings) would be less than 15 percent of the project area at any one time.
- Existing skid trails and landings would be re-used, where practical.
- Skid trails would be located perpendicular to slope angles (i.e., along the contour) as much as possible. Logs would be skidded with the leading end free of the ground to limit ground disturbance.
- Log landings would be located and constructed in such a way to minimize the amount of excavation needed and to reduce the potential for soil erosion. Landings would be designed to have adequate drainage.
- Cross-drains on skid trails would be spaced at least every 100 feet on gradients greater than 20 percent, or where needed, depending on slope and ground conditions.

- Existing vegetation would be retained, as possible, on cut and fill slopes.

Measures for Reclamation

- Landings would be de-compacted and runoff would be dispersed to prevent surface erosion and encourage revegetation using slash and seeding with site-specified native plant seed mix.
- Temporary roads not needed for post-sale treatment would be reclaimed before contract closeout.
  - All culverts, bridges, or other temporary crossings (including fill material) placed at stream crossings would be removed, the channel geometry would be restored, and the channel banks would be revegetated.
  - The road surface would be de-compacted to a minimum of six inches.
  - Effective ground cover would be established on disturbed sites to prevent accelerated on-site soil loss and sediment delivery to streams. Ground cover would be restored using certified local native plants, as practicable, to avoid persistent or invasive exotic plants.
  - All disturbed soils would be seeded within six working days of final grading, weather and soil conditions permitting. If the soil surface is crusted, appropriate measures would be taken to break up the crusted areas prior to seeding.
  - Temporary road intersections would be closed with berms or boulders.
- Temporary roads to remain open for post-sale treatment would be maintained by the purchaser before contract closeout in the following manner:
  - The road surface would be left in a manner to be traversed by a normal 4 wheel drive truck.
  - Drainage features would be left in place including bridges, culverts, water bars, cross ditches and roadside ditches.
- Temporary roads to remain open for post-sale treatment would be reclaimed as described under Temporary Roads not needed but these actions would be the responsibility of the Forest Service after the post-sale treatment is completed. The Forest Service would complete reclamation efforts within 5 years of post-sale treatments.
- Maintenance Level 1 roads would be reclaimed within five years after use ends in the following manner:
  - Treatment would be similar to items as described for temporary roads, except Engineering and Hydrological evaluations would be conducted and specific recommendations would be made to determine the long term structural and hydrologic stability of the stored road.
  - Road intersections would be closed with a gate or other approved closure device
- A careful review of erosion prevention work would be made by the Timber Sale Administrator before each harvest unit is accepted as final. The inspection would determine if the work is acceptable and meets the objective of the erosion control feature. Work would not be acceptable if it does not meet standards or is not expected to protect soil/water values.

Wildlife and Terrestrial Ecosystems

General Design Criteria

- Aspen clear-cuts that are 20 acres or greater would include leave tree groups of one-half to five acres in size on 10 percent to 15 percent of the overall treatment area. Where possible, the groups would have the following characteristics: live and/or dead large diameter wood on the forest floor, trees with evidence of cavities, broken/dead tops or lightning strikes. Basal areas should exceed 100 ft2/ac [within leave tree group].
- To meet the desired conditions, 5 to 10 snags per acre would be reserved in all stands and count towards the leave tree group design criteria of one-half to five acres on 10 percent to 15 percent of the overall treatment area (see above). Snags must be at least nine inches in diameter at breast height. If insufficient numbers of snags exist before the treatment, then additional snag recruits would be reserved. Snag recruits should have the following characteristics: at least nine inches in diameter with evidence of cavities, decay, broken/dead tops or lightning strikes.
- Surveys for Northern goshawks would be completed prior to project implementation. If active nests are discovered, all project operations would be restricted annually from March 1 to August 31 within one-half mile of the active nest.
- Project personnel would be informed to report any individual lynx noted during the duration of project activities. Any sightings or encounters with lynx would be reported to the District Wildlife Biologist, Dolores Ranger District, San Juan National Forest.
- To reduce impacts to elk from management activities proposed in Groundhog Cutoff, Groundhog Point, Hillside, Mavreeso and Orphan Butte treatment blocks, access to Colorado Parks and Wildlife elk production areas would be restricted May 15 –June 30.
- The use of water drafted from NFS streams for road maintenance, construction and dust abatement activities would be considered a water depleting activity with corresponding adverse effects to the four federally listed Colorado River fish. It is estimated that the project would require ten, 1,000 -1,500 gallon trucks, equaling approximately 15,000 gallons of water. This depletion amount is well within the Forest's allocated amount for road construction and maintenance in the biological opinion for the Land and Resource Management Plan Revision, dated August 14, 2013.
- To protect historic active purple martin colonies; pre-harvest surveys would be conducted to identify the perimeter of the active colony and a 300ft protection buffer would be applied to limit all operations associated with the proposed action.

Cultural Resources

- All historic property boundaries shall be buffered by 100 feet and shall be clearly delineated on the ground prior to treatment implementation. Boundary marking information shall be conveyed to appropriate Forest Service administrators or employees responsible for project implementation. Information shall be incorporated into implementation documents, contracts, and permits.

- No ground-disturbing project activities[1], staging of equipment or materials, or stockpiling of equipment or materials shall occur within the buffered boundary of any historic property.
- In the event that vegetation treatments would occur within the buffered boundary of a historic property, all vegetation shall be cut using hand tools and removed from the property by hand.
- Prior to the felling of any large-diameter tree, all features within the historic property shall be flagged or otherwise demarcated and a San Juan National Forest archaeologist shall visit the site with project implementers to discuss the locations of the features. The large-diameter tree shall be felled away from all features.
- No material shall be dragged across or within the buffered boundary of a historic property.
- If a previously undocumented historic property is discovered, or if inadvertent effects occur to a historic property, all work in the vicinity of the property shall cease and a San Juan National Forest archaeologist shall be notified immediately. The property shall be protected and project activities in the immediate vicinity of the property shall not resume until any actions necessary to resolve adverse effects to the property have been completed.
- Upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony, a San Juan National Forest archaeologist shall be immediately notified by telephone, with written confirmation. All project activities shall cease in the vicinity of the discovery, and the discovery shall be protected for 30 days, or until the contractor is given notice to proceed by a San Juan National Forest archaeologist or a San Juan National Forest timber sale administrator.

Recreation

- Within the Jersey Treatment Block, logging activity would be limited to one sale at a time where impacts to recreational activities (All-terrain vehicle riding, hunting, camping, snowmobiling, etc.) would be less extensive and more easily mitigated. This type of staged operation would alleviate impacts to recreationists in the entire project area at any one time including limiting closure of longer sections of the Aspen Loop system and allow connectivity to other motorized trails.
- Any significant trail improvements would receive contractual protection from damage as result of logging operations, including but not limited to, culverts, drainage structures, tread construction, signage or other trail infrastructure would be reconstructed to the appropriate Forest Service specifications referenced below. Any damage to that infrastructure would be required to be repaired after the completion of cutting operations in all cutting units that utilize the transportation routes. Responsibility for trail reconstruction/rehabilitation lies with the timber program with support from the district's recreation program in order to ensure trails are rehabilitated to Forest Service trail specifications.
- On any trails, including trails on ML1 roads, all improvements including culverts or preexisting surfacing or upgrades installed as result of logging operations would remain in place. Trail Management Objectives (TMO) would be followed for the impacted trail segments as part of post timber operation. Trail reconstruction would be performed to standards outlined in the Forest Service publication Standard Specifications for Construction and Maintenance of Trails (USDA USFS EM-7720-103, September 1996 and

[1] Includes the use of motorized treatment methods and burning of slash.

would be referenced in all contracts associated with the proposed project (Table 3 and Table 4, respectively).

Table 3. Trail reconstruction specification summary

Trail Name	Location	Reconstruction Specifications
Aspen Loop Trail #631	All trail segments impacted by logging operations.	No slash or debris left with in clearing limits of 72" wide. No ruts or protrusions >4" for 10'.
Morrison Trail #610	From MP 4 to MP 4.5	No slash or debris left with in clearing limits 72" wide). No ruts or protrusions >4" for 10'.
Groundhog Loop Trail	All trail segments impacted by logging operations.	No slash or debris left with in clearing limits 82" wide. No ruts or protrusions >4" for 10'.

Table 4. Trail closure specification summary

Intersection Location	Closure Specifications
Junction of Aspen Loop Trail #631 @ the Aspen Loop Trailhead.	Install a road gate to prohibit public entry during logging operations. Post logging operation install a boulder closure with a 50" gap or a width limiter traffic control device.
All other trail / open system road intersections utilized for timber operations	Post logging operation install a boulder closure with a 52" gap or a width limiter traffic control device set at 52".
Temp road and skid trail intersections with any forest service system trail.	Post logging operations install boulder closures or tank trap.

Additional trail maintenance and reconstruction on trails that are not on Level I roads or not specifically identified in a trail management objectives would be completed according to specifications from Forest Service publication Standard Specification for Construction and Maintenance of Trails (USDA USFS EM-7720-103, September 1996 and would be referenced in all contracts associated with the proposed project.

- Table 5 describes haul routes in the Jersey Jim and Rock locations. The approach would result in closing short sections of the Aspen Loop off-highway vehicle trail system. This management approach would maintain connectivity to other sections of the Aspen Loop off-highway vehicle system and would be included in any contracts associated with timber and/or hauling contracts. Timber operations in the Jersey Jim block would always allow one section of the Aspen Loop to remain open (e.g. access via the Aspen Loop trailhead or FSR 350).

Table 5. Haul routes for Jersey Jim and Rock geographic areas

Road Number	Cutting Unit Group	Trail Segment Temporary Closure	Timber Haul Route	Suggested OHV Route
350. T4	C Jersey Block	Aspen Loop from NFSR 350 to NFSR 561	Haul all products to NFSR 350 via temporary roads 350.T1 350.T2, 350.T3, 350.T3.A, 350.T4	Aspen Loop to NFSR 350; NFSR350 to NFSR 561
565	D Jersey Block	Aspen Loop from Trailhead to Aspen Spur	Haul all product to NFSR 561 via 565 and temporary roads 565.T1, 565.T2, 565.T2.A	From Aspen Loop Trailhead to NFSR 561 to NFSR 350 to junction with Aspen Loop trail
350. T6	E Jersey Block	Aspen Loop Cut Off from NFSR 350 to NFSR 565	Haul all product to NFSR 350 via temporary roads 350.T5, 350.T6, 565.T2, 565.T2A	From Aspen Loop Trailhead to NFSR 561 to NFSR 350 to junction with Aspen Loop trail
556.P	F Rock Block	Morrison from NFSR 556 to BC Rim	Haul all product to NFSR 556 via 556.P and temporary road 556.P T1	Aspen Loop Trail and 556; BC Rim remains open to Morrison Trail (no through traffic to Morrison)

*Timber operations in the Jersey Jim location would be implemented in a manner that allows one section of the Aspen Loop to always remain open for OHV use.
OHV – off-highway vehicle. NFSR – National Forest System road.

- To reduce holiday/weekend user conflicts, no hauling would be permitted on the West Mancos Road (FSR 561) from 12:00 P.M. Friday to 7:00 AM Monday, as well as, no hauling during the week of July 4.
- Plan for and accommodate winter recreational users. If the West Mancos Road (FSR 561) is plowed for winter operations, snowmobile passage would be accommodated to the extent possible. Plowing operations would be required to leave at least 2 inches of snow on plowed roadways to allow snowmobiles to pass through. If roads are plowed for winter logging operations near or above the Transfer Campground, the Chicken Creek trailhead parking lot would be plowed to accommodate snowmobile truck/trailer parking.
- Clear and prominent signage alerting the public to the presence of log trucks would be required at all times.
- Permitted winter activities include the Durango Dog Ranch and the San Juan Sledders. If conditions are not suitable to allow access to special use permit operations, winter recreation permit holders would coordinate with district recreation and timber staff to accommodate permit holder access. The transportation plan would provide safety protocol to ensure safe passage and communications between the logging contractor and the permit holders. This would be included in any timber contracts.
- Any units impacting Forest Service trails would have a 100 foot no treatment setback.
- In order to maintain travel management objectives included in the Mancos Cortez, Rico West Dolores and Boggy Glade Travel Management Decisions, any temporary routes or skid trails must be reclaimed in order to prevent them from becoming unauthorized routes. Closure methods can include berming, ripping, steel width restrictors, gating or bouldering.

Effectiveness of closures would be monitored by the Forest Service timber and recreation programs. If closures fail, they would be repaired or reinforced by the Forest Service.

- A temporary gate would be installed at the Aspen Loop off-highway vehicle parking area (intersection of FSR 565 and Trail # 631) to prevent full sized vehicle access to the Jersey Jim location. Where timber operations have resulted in full sized vehicles accessing motorized trails width restrictors (50-inch) would be installed to control access.
- If popular dispersed campsite occur near road closure points the recreation staff would be consulted before placing barriers.

Range

- Where possible, timber sale cut units and sale area boundaries would be aligned with pasture boundaries.
- As a general rule, cattleguards would not be placed on Maintenance Level 1 roads that would be placed back into storage.

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Appendix B - Map

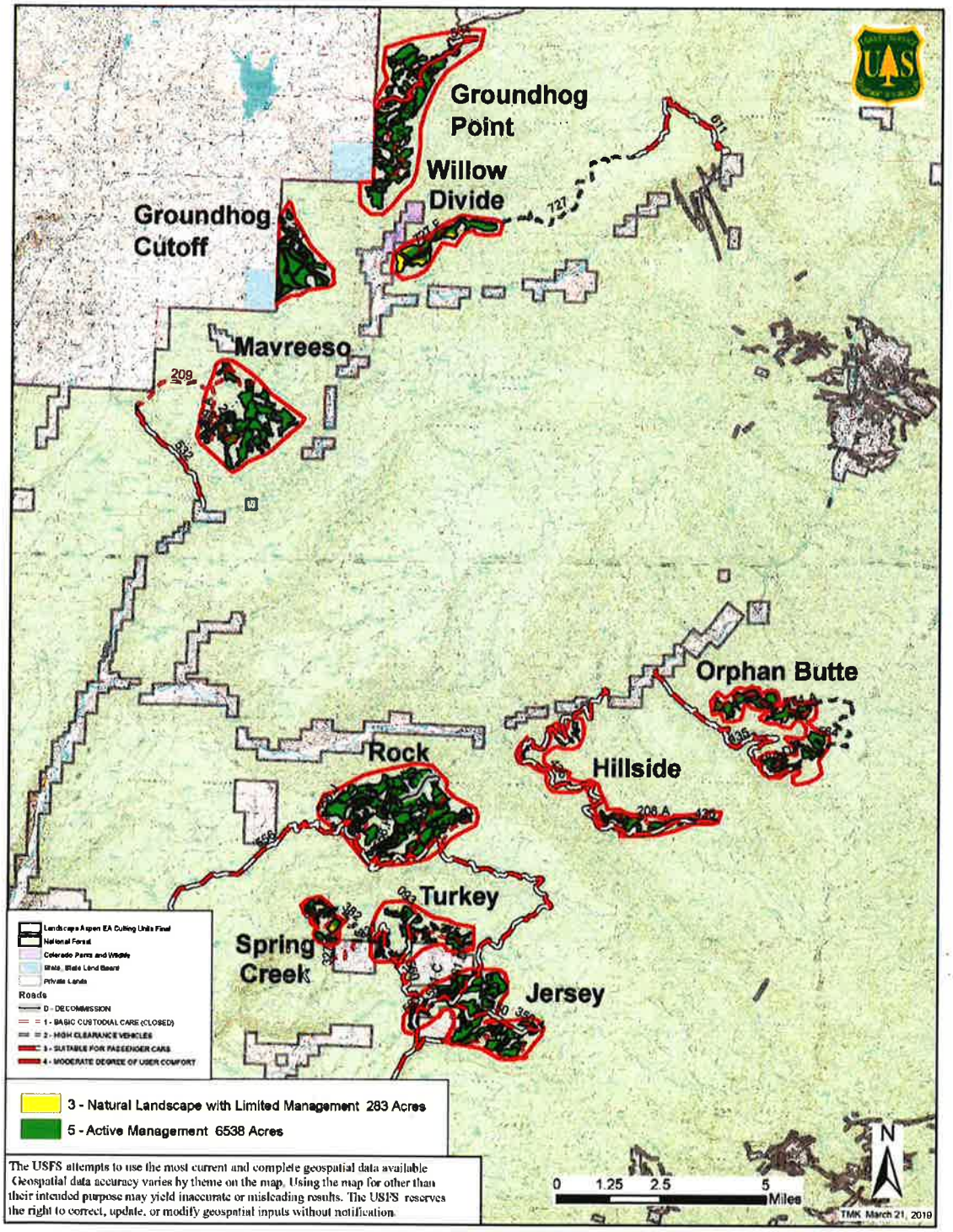

Figure A- 1. Treatment blocks by geographic location by management area